



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,731	08/22/2002	Karl Heinz Schmid	C 2079 PCT/US	4546

23657 7590 12/18/2007
COGNIS CORPORATION
PATENT DEPARTMENT
300 BROOKSIDE AVENUE
AMBLER, PA 19002

EXAMINER

CHANNAVAJALA, LAKSHMI SARADA

ART UNIT	PAPER NUMBER
----------	--------------

1615

MAIL DATE	DELIVERY MODE
-----------	---------------

12/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/088,731

Applicant(s)

SCHMID ET AL.

Examiner

Lakshmi S. Channavajjala

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-14, 17-20 and 23-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-14, 17-20 and 23-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of amendment and response dated 10-2-07 is acknowledged.

Claims 12-14, 17-20 and 23-31 are pending.

Claim Interpretation

A review of the instant specification and the amendments to claims presented on 3-22-03, 7-15-05 and -130-06 reveal that dicarboxylic acid monoester or dicarboxylic monoester salts such as alkali metal salts, alkaline earth metal salts, ammonium salts, alkyl ammonium salts and glucammonium salts, act as anionic surfactant foam stabilizers in the instant invention. According to the present amendment, the claimed composition (claims 12) requires 4 components – 1) an oliglycoside, 2) at least one of a dicarboxylic acid monoester and dicarboxylic monoester salt, wherein the monoester comprises the residue of a C6-C22 fatty alcohol, 3) anionic foam stabilizer and 4) mucous membrane compatibility enhancer selected from the group consisting of alkali metal salts, alkaline earth metal salts, ammonium salts, alkyl ammonium salts and glucammonium salts and optionally, an active ingredient. However, instant claim 18, directed to a process, recites components 1 and 2 of the above, where the component 2 is an anionic foam stabilizer and mucous membrane compatibility enhancer and where the salt of component 2 is selected from the group consisting of alkali metal salts, alkaline earth metal salts, ammonium salts, alkyl ammonium salts.

In view of the amendment, the following is a new rejection:

Claim Rejections - 35 USC § 112

Claims 12-14, 24 and 26-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

According to the present amendment, the claimed composition (claims 12) requires 4 components – 1) an oligglycoside, 2) at least one of a dicarboxylic acid monoester and dicarboxylic monoester salt, wherein the monoester comprises the residue of a C6-C22 fatty alcohol, 3) anionic foam stabilizer and 4) mucous membrane compatibility enhancer selected from the group consisting of alkali metal salts, alkaline earth metal salts, ammonium salts, alkyl ammonium salts and glucammonium salts and optionally, an active ingredient. However, instant claim 18, directed to a process, recites components 1 and 2 of the above, where the component 2 is an anionic foam stabilizer and mucous membrane compatibility enhancer and where the salt of component 2 is selected from the group consisting of alkali metal salts, alkaline earth metal salts, ammonium salts, alkyl ammonium salts. It is unclear if the composition of the instant claims requires only 2 components as in claim 18 or requires 4 components as interpreted by the examiner. Further, dependent claims 13 and 14 recite that the foam stabilizer is a monoester of C2-12 dicarboxylic acid, with claim 14 specifically reciting dicarboxylic acids. It is unclear if the description pertaining under b) is referring to a single component or different components, as explained above. A clarification and appropriate correction is requested.

The following rejection of record is maintained:

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 12-14, 17-20 and 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3623887 ('887) and JP 09308822.

'887 teaches food compositions such as flour mixes comprising a mixture of a fatty alcohol of C12-24 atoms and at least one of ester, including a fatty alcohol mono ester of a dicarboxylic acid (col. 1, L 14-30), for enhancing the emulsification. The fatty alcohol containing monoesters of dicarboxylic acids of '887 (col. 2, L 46-69) read on the instant component b and also includes the same dicarboxylic acids that are claimed in the dependent claims. '887 teach that the emulsification enhancement properties of the above compounds are also useful in cosmetic, pharmaceutical compositions in addition to food compositions (col. 1). Examples of '887 further teach sodium salts of dicarboxylic acid monoesters such as sodium stearyl fumarate (see example 3). '887 do not teach the component a) of the instant claims.

JP teaches oil-in-water emulsion composition comprising polyglycerol esters, one or more alkyl polyglucoside for use in food, cosmetic and drug industrial products (see abstract, paragraph 0015). JP teaches the instant claimed oligoglycosides for obtaining fine emulsions and also good emulsion stability (0019).

Thus, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the alkyl oligoglycoside of JP in the food composition containing dicarboxylic acid monoesters of fatty alcohols of US '887 because '887 teaches the monoesters of dicarboxylic acids enhance the emulsification of the food composition and JP also teaches the alkyl oligoglucosides for enhanced emulsification. Thus, both JP and '887 teach the claimed components for the same purpose i.e., enhanced emulsification, in the same types of compositions and also both the references suggest their application in cosmetic and pharmaceutical compositions. "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... The idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Further, optimizing the amounts of the two components for the same purpose i.e., enhanced emulsification would have been within the scope of a skilled artisan.

Response to Arguments

Applicant's arguments filed 10-2-07 have been fully considered but they are not persuasive.

Applicants argue that the claimed combination of oligoglucosides and dicarboxylic acid monoester salts result in enhanced foam stability and mucus

membrane compatibility (table 1 on page 26 of the application) and that the claimed invention is not obvious over '887 and JP references of record. It is argued that '887 discloses alcohol-enhanced emulsification mixtures comprising fatty alcohol monoester of aliphatic dicarboxylic acid and a fatty alcohol but fails to teach the claimed dicarboxylic acid monoester salts. It is argued that JP discloses emulsion comprising alkyl polyglucoside as an emulsifier and a polyglycerol ester but not the combination of the instant components a and b. It is argued that there is nothing in the teachings of JP or '887 to obtain a useful emulsifier by removing polyglycerol ester of JP and adding fatty alcohol monoester of aliphatic dicarboxylic acid of '887 and that the combination would render increased foam stability and mucus membrane compatibility, which are unexpected.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case, each reference teaches one of the claimed components as an emulsifier and the combination of emulsifiers of the cited prior art results in enhanced emulsification. With respect the unexpected properties of foam stability and mucus membrane compatibility, examiner notes that the inventive composition 1 and the comparative composition C4 have equal amounts of the claimed components and yet the instant composition shows higher foam and lower irritation. It is not clear as to how the comparative is different from the inventive composition so as to render the above

properties. Further, instant claims recite foam stability, whereas the table above shows increased foam and applicants have not correlated that an increase in foam equals stability. '887 suggests using the composition for cosmetic and pharmaceutical purposes and JP recognizes the emulsification properties. Besides both the references teach the components to be incorporated in foods, cosmetics and pharmaceuticals and hence a skilled artisan would have expected that the compositions are compatible for topical or oral use and thus possess compatibility.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Application/Control Number:
10/088,731
Art Unit: 1615

Page 8

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 7.00 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AU 1615

December 12, 2007


LAKSHMI S. CHANNAVAJJALA
PRIMARY EXAMINER